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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,348	04/09/2004	Kiyoshi Okamoto	CFA00077US	9999
34904 7590 02/04/2010 CANON U.S.A. INC. INTELLECTUAL PROPERTY DIVISION 15975 ALTON PARKWAY IRVINE, CA 92618-3731				
EXAMINER				
FACTOL, NICHOLAS C				
ART UNIT		PAPER NUMBER		
2625				
NOTIFICATION DATE		DELIVERY MODE		
02/04/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

sivon.kalminov@cda.canon.com  
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IPDocketing@cda.canon.com

### Office Action Summary

**Application No.**

10/821,348

**Applicant(s)**

OKAMOTO, KIYOSHI

**Examiner**

Nicholas C. Pachol

**Art Unit**

2625

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20, 21, 24, 26, 34 and 36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20, 21, 24, 26, 34 and 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims 20-24, 26-30, 32, and 33 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 20, 21, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maehara (US 5,852,501) in view of Toyomura (US 5,796,928) further in view of Onuki (US 6,201,944) further in view of Kamanuma (US 6,256,473).

Regarding Claim 20, Maehara teaches an automatic document feeder (Figure 2, element 12 and Column 6, lines 49-50) comprising:

a document tray on which a plurality of documents can be placed (Figure 2, element 13 and Column 6, line 50);

a separating section configured to separate the documents placed on the document tray one by one (Column 5, lines 25-38);

a feeding section configured to feed the separated document to a document reading position (Column 9, line 65 – Column 10, line 33); and

a sensor section provided between the separating section and the document reading position and configured to detect passage of a document separated by the separating section (Column 8, lines 31-44 and Column 9, line 65 – Column 10, line 33 and Figure 2, elements 14 and 17).

Maehara does not teach an input section inputting information on the material of the document; and

a separation control section for controlling timing of starting a separating operation of a next document in the separating section based on whether a leading edge of the next document is detected but the trailing edge of a preceding document is not detected from the sensor section, wherein the separation control section controls the separating section so that the timing of starting a separating operation of a next document in a case where the information on the material of the document inputted by the input section is predetermined information is later than the timing of starting a separating operation of a next document in a case where the information on the material of the document inputted by the input section is not the predetermined information.

Toyomura does teach a separation control section controlling timing of starting a separating operation of a next document in the separating section based on an output from the sensor section, wherein the separation control section controls the separating section so that the timing of starting a separating operation of a next document in a case where the information on the material of the document inputted by the input section is predetermined information is later than the timing of starting a separating operation of a next document in a case where the information on the material of the

document inputted by the input section is not the predetermined information (Column 10, lines 33-55).

Maehara and Toyomura are combinable because they both deal with controlling the operations of a copier.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Maehara with the teachings of Toyomura for the purpose of reading a color image with a higher continuous tone reproducibility (Toyomura: Column 10, lines 33-55).

Onuki does teach an input section inputting information on the material of the document (Column 8, lines 48-63, wherein based on the specification, the material type seems to be defined as if it is a color or monochrome document).

Maehara and Onuki are combinable because they both deal with controlling the operations of a color copier.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Maehara with the teachings of Onuki for the purpose of allowing the user to define the type of document to be copied (Onuki: Column 8, lines 48-63).

Kamanuma teaches a separation control section for controlling timing of starting a separating operation of a next document in the separating section based on whether a leading edge of the next document is detected but the trailing edge of a preceding document is not detected from the sensor section (Column 16, lines 37-64).

Maehara and Kamanuma are combinable because they both deal with controlling the operations of a copier.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Maehara with the teachings of Kamanuma for the purpose improving the productivity in regard to reading the original document (Kamanuma: Column 17, lines 6-9).

Regarding Claim 21, Maehara does not teach wherein the input section inputs information on whether or not the document is recording sheet had been recorded in color.

Onuki does teach wherein the input section inputs information on whether or not the document is recording sheet had been recorded in color (Column 8, lines 48-63).

Maehara and Onuki are combinable because they both deal with controlling the operations of a color copier.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Maehara with the teachings of Onuki for the purpose of allowing the user to define the type of document to be copied (Onuki: Column 8, lines 48-63).

Regarding Claim 24, Maehara does not teach wherein the input section inputs information set by a console section of a connected imaging device or information set by a console section of the document feeder.

Onuki does teach wherein the input section inputs information set by a console section of a connected imaging device or information set by a console section of the document feeder (Column 8, lines 48-63).

Maehara and Onuki are combinable because they both deal with controlling the operations of a color copier.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Maehara with the teachings of Onuki for the purpose of allowing the user to define the type of document to be copied (Onuki: Column 8, lines 48-63).

4. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maehara (US 5,852,501) in view of Toyomura (US 5,796,928) further in view of Kamanuma (US 6,256,473).

Regarding Claim 26, Maehara teaches an automatic document feeder connected to an imaging device (Figure 2, element 12 and Column 6, lines 49-50) comprising: a document tray on which a plurality of documents can be placed (Figure 2, element 13 and Column 6, line 50);

a separating section configured to separate the documents placed on the document tray one by one (Column 5, lines 25-38);

a feeding section configured to feed the separated document to a document reading position (Column 9, line 65 – Column 10, line 33);

a sensor section provided between the separating section and the document reading position and configured to detect passage of a document separated by the separating section (Column 8, lines 31-44 and Column 9, line 65 – Column 10, line 33 and Figure 2, elements 14 and 17);

a determining section determining whether the recording mode of the imaging device is a color recording mode or a monochrome recording mode (Column 13, lines 25-37).

Maehara does not teach a separation control section controlling timing of starting a separating operation of a next document in the separating section based on whether a leading edge of the next document is detected but a trailing edge of a preceding document is not detected from the sensor section; and

wherein the separation control section controls the separating section so that the timing of starting a separating operation of a next document in a case where the recording mode of the imaging device is the color recording mode is later than the timing of starting a separating operation of a next document in a case where the recording mode of the imaging device is the monochrome recording mode.

Toyomura does teach wherein the separation control section controls the separating section so that the timing of starting a separating operation of a next document in a case where the recording mode of the imaging device is the color recording mode is later than the timing of starting a separating operation of a next document in a case where the recording mode of the imaging device is the monochrome recording mode (Column 10, lines 33-55).



Maehara and Toyomura are combinable because they both deal with controlling the operations of a copier.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Maehara with the teachings of Toyomura for the purpose of reading a color image with a higher continuous tone reproducibility (Toyomura: Column 10, lines 33-55).

Kamanuma teaches a separation control section controlling timing of starting a separating operation of a next document in the separating section based on whether a leading edge of the next document is detected but a trailing edge of a preceding document is not detected from the sensor section (Column 16, lines 37-64).

Maehara and Kamanuma are combinable because they both deal with controlling the operations of a copier.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Maehara with the teachings of Kamanuma for the purpose improving the productivity in regard to reading the original document (Kamanuma: Column 17, lines 6-9).

5. Claims 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maehara (US 5,852,501) in view of Toyomura (US 5,796,928) further in view of Onuki (US 6,201,944) further in view of Kamanuma (US 6,256,473) further in view of Yokota (US 2003/0038989).

Regarding Claim 34, Maehara in view of Toyomura further in view of Onuki further in view of Kamanuma does not teach wherein the sensor section includes a first sensor and a second sensor provided downstream of the first sensor, and wherein the separation control section controls the separating section to start a separating operation of a next document based on an output from the first sensor in a case where the information on the material of the document inputted by the input section is not the predetermined information, and controls the separating section to start a separating operation of a next document based on an output from the second sensor in a case where the information on the material of the document inputted by the input section is the predetermined information.

Yokota does teach wherein the sensor section includes a first sensor and a second sensor provided downstream of the first sensor, and wherein the separation control section controls the separating section to start a separating operation of a next document based on an output from the first sensor in a case where the information on the material of the document inputted by the input section is not the predetermined information, and controls the separating section to start a separating operation of a next document based on an output from the second sensor in a case where the information on the material of the document inputted by the input section is the predetermined information (Page 8, paragraph 142, wherein the information about the material is already known from Maehara. Yokota is used to teach that two sensors can be used to control the timing).

Maehara in view of Toyomura further in view of Onuki and Yokota are combinable because they both deal with controlling the operations of a copier.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Maehara in view of Toyomura further in view of Onuki further in view of Kamanuma with the teachings of Yokota for the purpose of controlling the timing of the reading (Yokota: Page 8, paragraph 142).

6. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maehara (US 5,852,501) in view of Toyomura (US 5,796,928) further in view of Kamanuma (US 6,256,473) further in view of Yokota (US 2003/0038989).

Regarding Claim 36, Maehara in view of Toyomura further in view of Kamanuma does not teach wherein the sensor section includes a first sensor and a second sensor provided downstream of the first sensor, and wherein the separation control section controls the separating section to start a separating operation of a next document based on an output from the first sensor in a case where the information on the material of the document inputted by the input section is not the predetermined information, and controls the separating section to start a separating operation of a next document based on an output from the second sensor in a case where the information on the material of the document inputted by the input section is the predetermined information.

Yokota does teach wherein the sensor section includes a first sensor and a second sensor provided downstream of the first sensor, and wherein the separation

control section controls the separating section to start a separating operation of a next document based on an output from the first sensor in a case where the information on the material of the document inputted by the input section is not the predetermined information, and controls the separating section to start a separating operation of a next document based on an output from the second sensor in a case where the information on the material of the document inputted by the input section is the predetermined information (Page 8, paragraph 142, wherein the information about the material is already known from Maehara. Yokota is used to teach that two sensors can be used to control the timing).

Maehara in view of Toyomura further in view of Kamanuma and Yokota are combinable because they both deal with controlling the operations of a copier.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Maehara in view of Toyomura further in view of Kamanuma with the teachings of Yokota for the purpose of controlling the timing of the reading (Yokota: Page 8, paragraph 142).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas C. Pachol whose telephone number is 571-270-3433. The examiner can normally be reached on M-Thr, 8:00 a.m.- 4:00 p.m. (EST), Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler L. Haskins can be reached on 571-272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. C. P./  
Examiner, Art Unit 2625

01/25/10

/Twyler L. Haskins/  
Supervisory Patent Examiner, Art Unit 2625